

Claims

1. A battery-operated screwdriver (10), having a housing (12, 18) with a grip (14) with
5 a battery (40) that in particular is fixedly built in, and with charging contact tongues (37)
for charging the battery (40),
wherein counterpart contacts (34) solidly connected to the tool, in conjunction with a
contact plate (32), which is movable by means of an ON/OFF trigger (26) and is
coupleable to the counterpart contacts (34) and is easily releasable upon release of the
10 ON/OFF trigger (26), serve as ON/OFF switches.
2. The battery-operated screwdriver according to claim 1,
wherein the ON/OFF trigger (26) extends over nearly the entire length of the grip (14)
and is actuatable for switching ON the tool at an arbitrary point in conjunction with a short
15 actuation stroke of 1 to 5 mm, preferably 2 mm.
3. The battery-operated screwdriver according to claim 1,
wherein the ON/OFF trigger (26) is braced in prestressed fashion counter to the
actuation direction on the housing (12) by means of two spiral springs (28, 30).
- 20 4. The battery-operated screwdriver according to claim 1,
wherein only a single, elongated, slender lithium-ion (Li-ion) cell, as the battery (40),
is located in the grip (14).
- 25 5. The battery-operated screwdriver according to claim 1,
wherein its work spindle (20), instead of a chuck, has a polygonal socket (21) for the
use of fitting screw or bore bits with a polygonal shank.
- 30 6. The battery-operated screwdriver according to the preamble to claim 1,
wherein the battery (40) is positionally secured, held in tonglike fashion, in the interior
of the grip (14) by means of half-shells (16, 17) of the housing (12) and serves as a means
for stiffening the housing structure.
7. The battery-operated screwdriver according to claim 1,

wherein a circuit board (36) serving to receive electrical contacts (32, 34) and control elements extends along the grip (14) in its interior and - held in tonglike fashion by means of the half-shells (16, 17) of the housing (12) - serves to stiffen the housing (12).

5 8. The battery-operated screwdriver according to claim 8,
 wherein the circuit board (36) has charging contact tongues (38), counterpart contacts
 (34) for switching a motor (46) ON, the battery (40), a slide switch (38) for reversing the
 direction of rotation of the motor (46), two light-emitting diodes (57, 58) for indicating the
 direction of rotation, and means for controlling the charging and discharging current of the
10 battery (40).

9. The battery-operated screwdriver according to claim 1,
 wherein it has means (38), separate from the ON/OFF trigger (26), for reversing from
 clockwise to counterclockwise operation.

15 10. The battery-operated screwdriver according to claim 8,
 wherein for reversing from clockwise to counterclockwise operation, a slide switch
 (38) soldered to the circuit board (36) is provided, which is actuated via a slide button (39)
 that in particular is longitudinally displaceable.

20 11. The battery-operated screwdriver according to claim 1,
 wherein when the ON/OFF trigger (26) is depressed, the slide switch (38) is blocked,
 and the ON/OFF trigger (26) is blocked whenever the slide button (39) is in the middle
 position.

25 12. The battery-operated screwdriver according to claim 1,
 wherein after the emplacement of a circuit board (36), carrying the electrical parts or
 wired to them, with the battery (40), a motor (46), an ON/OFF trigger (26), a slide switch
 (38) with a slide button (39), two light-emitting diodes (57, 58), and a transparent plastic
30 part acting as a window (59), as well as the emplacement of the gearbox (18) into the first
 half-shell (16) and the ensuing joining together above it of the second half-shell (17) and
 screwing the half-shells (16, 17) together with only four identical screws, the battery-
 operated screwdriver is fully assembled.

13. The battery-operated screwdriver according to claim 1,
wherein a large-area rubber sheathing with a bumpy structure protruding in beadlike
fashion is located on each half-shell (16, 17) in the region of the grip (14).